CLAIMS

1. A process for cleaning an integrated circuit package surface, comprising:
introducing said integrated circuit inside a plasma chamber; and
exposing said integrated circuit to a plasma said plasma being a physical plasma.

2. The cleaning process according to Claim 1, wherein said physical plasma has a halogen-type behavior.

3. The cleaning process according to Claim 1 wherein said physical plasma is obtained in the presence of a pure noble gas.

4. The cleaning process according to Claim 3, wherein said noble gas is argon.

5. The cleaning process according to Claim 1 wherein said step of exposing said integrated circuit to a physical plasma comprises the step of energizing said physical plasma by applying the following energization parameters: energization time, between 12 and 15 seconds; energization power, between 140 and 160 W; and plasma chamber pressure, between 190 and 210 millitorr.

6. The cleaning process according to Claim 1, further including:
applying a continuous voltage to obtain ionization of said plasma.

7. The cleaning process according to Claim 1, further including:
applying a radio-frequency voltage at a frequency of between 1 kHz and 100 GHz, to obtain ionization of said plasma.

8. The cleaning process according to Claim 1 wherein the exposing of said integrated circuit to a physical plasma occurs in a single exposure.

9. The process according to Claim 1 wherein the package is composed of a ceramic material.

10. The manufacturing process according to Claim 1, wherein said ink marking process is carried out using a laser ink marking technique.

11. The process according to Claim 1 wherein the package is composed of a plastic material.

12. The process according to Claim 1 wherein the package is composed of an epoxy resin material.

13. The process according to Claim 1 wherein the package includes exposed metal components.

14. A process for manufacturing an integrated circuit, comprising:

cleaning of an integrated circuit package surface by introducing the packaged integrated circuit into a plasma chamber;

exposing the package surface to a physical plasma;

removing a layer of material from the package surface to clean the upper surface of the package; and

ink marking said package surface.

15. The manufacturing process according to Claim 14, wherein said ink marking process is carried out using a laser ink marking technique.

16. The process according to Claim 14 wherein the package is composed of a ceramic material.

17. The process according to Claims 14 wherein the package is composed of a plastic material.

18. The process according to Claim 14 wherein the package is composed of an epoxy resin material.

19. The process according to Claim 14 wherein the package includes exposed metal components.